International Fund for Animal Welfare

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RE: Proposed Rule for Taking Marine Mammals Incidental to Navy Operations of Surveillance Towed Array Sensor System (SURTASS) Low Frequency Active (LFA) Sonar, 66 FR 15375

Dear Ms. Wieting,

Thank you for the opportunity to provide comments on the National Marine Fisheries Service's (NMFS) proposed Letter of Authorization (LOA) to the U.S. Navy for the take of marine mammals incidental to Navy operations of Surveillance Towed Array Sensor System (SURTASS) Low Frequency Active (LFA) Sonar. While the International Fund for Animal Welfare (IFAW) commends the U.S. Navy for conducting such a thorough National Environmental Policy Act (NEPA) review process, we believe that the information provided in the Final Environmental Impact Statement (FEIS) is inadequate to justify issuance of the proposed rule.

IFAW has a long history of working on marine mammal acoustics, and our scientists have serious concerns about the potential effects of the SURTASS LFA sonar on marine mammals. Specifically, we are concerned that: 1) the proposed monitoring scheme is insufficient to determine the actual harm from the SURTASS LFA sonar to marine mammals; 2) the actual takes (i.e., injury and harassment) of marine mammals will likely be much higher than that assumed in the Proposed Rule; and 3) the monitoring for prevention of injury to marine mammals may actually cause additional harm to some species of marine mammals. Based on these concerns, IFAW does not believe that NMFS can make the findings that the proposed SURTASS LFA sonar will have a negligible impact on the affected species and stocks of marine mammals, and that these impacts are at the lowest level practicable. Our specific concerns are set forth below.

Proposed monitoring and mitigation are insufficient to determine actual level of marine mammal takes

The Marine Mammal Protection Act (MMPA) provides that in order for NMFS to issue a LOA and final regulations governing the take of marine mammals, NMFS must determine, among other things, that the activity in question will have a negligible impact on the affected species and stocks of marine mammals, and be at the lowest level practicable. Due to the potential effects of LFA sonar on a large number of marine mammals within the area of ensonification, NMFS is forced to rely heavily on the monitoring and mitigation schemes proposed by the Navy to determine actual effects. The Navy states that it will focus its monitoring in the 1 kilometer "safety zone" (i.e., the distance from the SURTASS LFA sonar source to the 180 dB isopleth). The Navy's mitigation measures are basically two-fold: 1) SURTASS LFA sonar will be suspended if marine mammals are found through a tripartite monitoring scheme to be within the safety zone; and 2) the Navy will conduct its sonar operations in such a way as to prevent the sound field from exceeding 180 dB within 12 nautical miles of any coastlines, or in the four offshore biologically important areas (OBIAs) listed in the proposed regulations. In order to determine whether marine mammals are in the safety zone of the sonar operation, and to determine and document potential effects of the SURTASS LFA sonar on marine mammals, the Navy will conduct visual assessments, passive acoustic surveys, and active acoustic surveys using high frequency sonar (HFM3). The Navy assumes that this proposed tripartite monitoring scheme would be 80 percent efficient.

However, the U.S. Navy insists that in order for training to be effective it must simulate conditions that would be expected during periods of heightened readiness or conflict. Since the Navy must be ready for conflict at all times, and since hostile situations occur in all types of weather conditions, sea states, and during the night, the SURTASS LFA sonar will be deployed in these conditions as well. However, monitoring effectiveness will decrease substantially during these times. Effective visual monitoring is limited to daylight hours and good weather conditions. Therefore, there will be no visual monitoring for marine mammals during nighttime deployments of the SURTASS LFA sonar, or when the sea states are high, or fog or other poor weather conditions exist to prevent visual monitoring.

To compound the inherent problems with the Navy's visual monitoring scheme, NMFS states in its proposed rule that it is not yet certain of the effectiveness of the HFM3 active sonar. Therefore, NMFS plans to calculate incidental take levels using only geographic mitigation. With such obvious uncertainty associated with the Navy's monitoring scheme, it is unclear how NMFS can determine that the deployment of the SURTASS LFA sonar will have a negligible impact on the affected species and stocks of marine mammals, and be at the lowest level practicable.

In addition, NMFS has asked the Navy to concentrate its monitoring in areas where marine mammals are more likely to receive an injury (i.e., within 1 km of the source of the SURTASS LFA sonar). However, as many scientists have pointed out in comments on the Final Environmental Impact Statement (FEIS), many takes will occur outside of this 1 km range. Since monitoring for these takes is virtually non-existent, it will be impossible to assess the effects of the SURTASS LFA sonar on marine mammals throughout the world's oceans.

Finally, the Navy claims that data from the long-term monitoring program cannot be available in real time because of post-mission analysis requirements, and NMFS has agreed to accept monitoring data annually. This translates into a year-long lag-time between the deployment of the SURTASS LFA sonar and monitoring results becoming available. Should the SURTASS LFA sonar result in more than a negligible impact on marine mammals, a full year will elapse before NMFS will be in a position to be able to react.

Actual takes of marine mammals will likely be much higher than that assumed in the Proposed Rule

The 1994 amendments to the MMPA define "Level A Harassment" as activities having the potential to injure a marine mammal or marine mammal stock, and Level B Harassment as having the potential to disturb a marine mammal or marine mammal stock by causing disruption or behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering. The proposed LOA is for "incidental taking by harassment and non-serious injury" only, which is Level B Harassment. However, NMFS concedes in its preamble to the proposed LOA that "some Level A harassments still need to be considered possible." If this is indeed the case, then the Navy would presumably need a Level A harassment take permit as well.

As stated above, additional takes will almost certainly occur outside the 1 km safety range. Potential non-detectable and unmonitored effects of the SURTASS LFA sonar include increases in miscarriage rates, increased vulnerability to other anthropogenic threats (such as entanglement in fishing gear or susceptibility to ship strikes), decreases in feeding rate, changes in lactation rates, increased stress, changes in navigational abilities, potential hearing loss, etc.[1] Even the Navy concedes that incidental takes consisting of "short-term behavioral modifications" will occur outside the 180 dB isopleth. Since these effects are typically undetectable (unless there is a catastrophic effect that is pervasive throughout large numbers of individuals), it will be impossible to assess or monitor these effects. Given this, IFAW does not believe that NMFS can make a finding of negligible impact on marine mammals.

It is also of great concern to IFAW that the proposed LOA specifically allows for takes of northern right whale (*Eubalaena glacialis*) (see Section 216.180(b)(i)). As you are aware, the northern right whale is critically endangered, with a population of around 300 animals. Any takes of this species from SURTASS LFA sonar are unacceptable. NMFS has included the 200-meter isobath of the North American East Coast as an OBIA in an apparent attempt to protect the right whale. However, right whales are occasionally seen outside the 200-meter isobath, despite the fact that surveys for the right whales offshore are minimal (thus underestimating the occurrence of right whales offshore due to low survey effort). The aforementioned non-detectable and unmonitored effects of SURTASS LFA sonar could be devastating to a population as vulnerable as the northern right whale. Therefore, IFAW is concerned that this critically endangered species is at greater risk from the deployment of the SURTASS LFA sonar than is set forth in the FEIS.

Finally, IFAW is concerned that the cumulative effects of the proposed SURTASS LFA sonar in conjunction with the potential deployment of other nations' low frequency sonar was not addressed in the FEIS or the proposed rule. Unfortunately, many other countries do not engage in open and transparent decision-making review processes as in the United States. However, it is has been reported that the United Kingdom, Germany, the Netherlands, France, and Canada are all in the process of developing their own LFA sonar systems. Multiple deployments of LFA sonar in the world's oceans may have a devastating cumulative effect on marine mammals.

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[1] In addition, there are some potential effects of the SURTASS LFA sonar that may be detectable over long periods of time in well-monitored populations, such as decreased birth rates and increased mortality. However, it may be difficult, if not impossible, to attribute these effects to the sonar.

The monitoring for prevention of injury to marine mammals may actually cause additional harm to some species of marine mammals

The Navy proposes to use HFM3 active acoustic monitoring to detect, locate and track marine mammals near the LFA mitigation zone (within 1 km of the towed array). The HFM3 will start at a high frequency, 180 dB level, and be ramped up in 10 dB increments until full power is attained. Such high frequency acoustic monitoring has the potential to disturb small and medium-sized cetaceans (including the beaked whales). It is non-sensical to rely on a monitoring system that is itself harmful to marine mammals as well as unproven in its effectiveness.

The Navy compares the HFM3 with common fish-finding sonar, and states that it is harmless. IFAW believes that this comparison is irrelevant, as fish-finding sonar is typically focussed in a narrow beam below the vessel where it is less likely to disturb marine mammals. In contrast, the HFM3 sonar proposed here is radiated horizontally in all directions, and has a much greater likelihood of affecting marine mammals.

Conclusion

In conclusion, IFAW does not believe that NMFS can make a determination that the proposed SURTASS LFA sonar will have a negligible impact on the affected species and stocks of marine mammals, or that such impacts are at the lowest level practicable. In fact, it appears that the actual level of takes will exceed that allowed in the proposed LOA both in numbers (i.e., the harassment of marine mammals outside the mitigation zone) and in scale (i.e., Level A and Level B harassments will occur). Moreover, IFAW is greatly concerned about the proposed impacts to the northern right whale. Therefore, we urge NMFS to deny the Navy's request for a LOA for the take of marine mammals incidental to the deployment of the SURTASS LFA sonar.

Please feel free to call me at (508)744-2081 if you have any questions.

Sincerely,

Fred O'Regan, President
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